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APR 20 1989

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS SITE MITIGATION
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M E M O R A N D U M

TO: LARRY LONGO, Site Manager
Bureau of Site Management II

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Bureau of Environmental Evaluation & Risk Assessment

FROM: DAVID S. DOYLE, HSMS II DD
CHARLES VAN SCIVER, Sampling Program Manager CVS
Environmental Measurements Section

SUBJECT: PRICE'S LANDFILL #1 OFFSITE SOIL INVESTIGATION - 4/12/89
Mill Road, Pleasantville City/Egg Harbor Township
Atlantic County, New Jersey

Purpose:

Pursuant to your inter-divisional work request #1045 dated March 16, 1989, a surface and subsurface soil investigation was conducted at the above referenced site on April 12, 1989. The investigation was conducted in response to recent information reported by Camp, Dresser and McKee (CDM) during their RI/FS of the site. It was reported by CDM that debris and refuse was found along both the suspected north and south boundaries of the site. The debris and refuse was reported to be present at depths to 18 ft. The objective of the investigation conducted by NJDEP was to determine if the landfill extended beyond the southern boundary. A review of the aerial photography by Larry Longo, BSM and Mike Hornsby, BEERA revealed that excavation was performed beyond the present southern property line during the site's history.

Personnel On Site:

Larry Longo, BSM II
Charles Dispoto, BOC
Matt Westgate, EPA
Chad Van Sciver, EMS
Dave Doyle, EMS

Weather Conditions:

Clear, 40-50's°F

Methodology:

The investigation conducted by NJDEP consisted of soil borings for physical observation only. Samples were not collected for chemical analysis. Soil borings were performed with stainless steel bucket augers along Lines A-K (See Figure 1). Lines A-E extended East to West throughout the neighboring property owned by Iaconelli Rental/Demolition. Lines F-K extended East to West along on the property which borders both the landfill and the Iaconelli property (see Figure 1). This property is owned by Donald Trump Associates. The soil from each boring was observed for any refuse material, obvious staining and odor.

Field Sampling Log:

See Table I and Figure 1.

Discussion:

Access was granted to all properties prior to performing the investigation. A brief inspection of the Iaconelli property revealed that approximately 25% of the property was covered with bituminous asphalt pavement. In addition the property is used for storage of heavy construction equipment and demolition debris. Access for an extensive soil boring investigation was therefore limited, although the owner did offer to move material if necessary.

As noted in Table I, the maximum depth achieved at the Iaconelli property was three (3) feet. Refusal was encountered at each location due to what appeared to be construction/demolition debris at and below the ground surface. At several locations, the subsurface soil was found to be stained with a black oily material with a petroleum-like odor (boring locations B1, B2, C1 and D2).

At the request of NJDEP a trench was dug at boring location D2 by a front end loader working on the site. The trench did confirm buried demolition debris and stained soil at this location. The petroleum-like odor was very strong in the trench.

As reported in Table I, landfill debris/refuse was not found to a depth of 4-6 ft. from lines F-I. Intermittent pieces of debris were found at boring locations J1, K1, K2 and K3 which correspond to a pit identified during the referenced aerial photography review. It should be noted that an unidentified odor was detected in the soils at boring locations G1, H1 and I1. The odor was described as chemical in nature resembling creosote, fertilizer and chemicals used for lawn care.

Three (3) borings were attempted on Price's Landfill #1 following the investigation to determine if the oil stained soil existed at the border of the landfill and the Ianocelli property. Refusal was encountered at each hole due to municipal trash and wood. The oil stain soil was not present at the surface or at a depth of approximately one foot.

Conclusions

The investigation revealed that buried demolition debris and stained soil exist both at the surface and below the surface of the Iaconelli property. The investigation was limited both horizontally and vertically by the asphalt pavement, soil compaction caused by the heavy truck traffic, buildings, and buried and unburied demolition equipment and debris. It therefore could not be concluded if the Iaconelli property was once a part of the Price's Landfill #1 operation or a separate burial/disposal site.

The boring locations along lines F-I did confirm that the buried material did not extend beyond the Iaconelli property along its southern property line. As stated above, intermittent pieces of debris were found at boring locations J1, K1, K2 and K3. The aerial photography review by L. Longo and M. Hornsby did reveal the presence of an excavation pit in this area.

It was not concluded if the intermittent pieces of debris were an indicator of the landfill extending beyond the current southwestern borders or remnants of sporadic overflow from the landfill operations.

Recommendations:

Since clear conclusions could not be drawn by this limited investigation the following recommendations are presented for your considerations.

A minimum of seven (7) test pits should be excavated for exploratory and data collection purposes. Two of seven test pits should be excavated on the landfill along its southern property line and adjacent to CDM's B1 boring (See Figure 1). The test pits would help to identify the type of municipal trash present along the southern property line. Soil samples would not be collected from these two test pits. The five (5) remaining test pits should be excavated on the Ianocelli and Trump properties along and perpendicular to the southern border of the landfill. The first test pit should be excavated approximately 25 feet from the northeast corner of the Ianocelli property and approximately seventy-five (75) feet south of the property line. The remaining four (4) would be excavated at intervals of 100 ft. parallel to the first test pit. Samples collected for chemical analysis would be based upon visual contamination, elevated FID, PID readings and/or changes in subsurface strata. The samples and associated QA/QC samples would be analyzed and reported under the following criteria.

# of Sample	Type of Sample	Parameters	Task	Tier
5	Non-aqueous (soil)	TCL + 30	IV	Ib
1	Non-aqueous (soil) duplicate	TCL + 30	IV	Ib
1*	Aqueous Trip blank	TCL VOA	IV	Ib
1**	Aqueous Field blank	TCL + 30	IV	Ib

* One per day or sample shipment
** One per day

It is recommended that the test pits be staked out prior to mobilizing on and offsite. The preceding recommendations require consideration regarding the logistics of any type of excavation at the Iaconelli property. The owner of the property will have to be notified well in advance since extensive removal and relocation of heavy equipment and material will be necessary. The test pits may have to be relocated in accordance with this operation. Once the test pits have been staked and the area secured the test pits should be dug to a depth where a judgement can be made with confidence that the landfill does not extend to this area. It is anticipated that cave-ins will occur due to the instability of the sandy loam substrata and that a maximum achievable depth (without sidewall shoring) will be approximately 15 feet. The backhoe utilized for test pit excavation must be of sufficient size to achieve sufficient depths and to penetrate the debris and compacted soils present.

Depending upon the findings of the first seven (7) test pits a determination would be made if additional test pits would be required. Additional test pits would be required, either closer or further to the landfill depending upon the discovery of municipal trash.

EMS will be able to perform the necessary exploratory and sampling work once the Sampling Assistance Contract X-218 is awarded. The anticipated award date is an estimated 4-8 weeks.

It is recommended that the sampling data be forwarded to QAS for review and validation. Please be advised that EMS is available for any further assistance regarding the sampling design.

HS222:mml

w/attachments

c: Nancy Hamill, BEMQA
Charles Dispoto, BOC
Tamarra Roundtree, DWR/BGWPA
Central file - B10

TABLE I

FIELD LOG - PRICE'S LANDFILL #1 - 4/12/89

BORING LOCATION #	TIME	DEPTH (inches)	DESCRIPTION	COMMENTS
A1	0855	0-24*	Construction debris present	
B1	0905	0-36*	3" depth - wood and stained soil construction debris/plastic	Soil stained with black oily material. Slight petroleum odor
B2	0910	0-24*	Concrete/brick 14" depth - oil stained soil	Slight petroleum-like odor
A2	0910	0-24*	Construction debris	
B3	0925	0-9*	Construction debris	
C1	0932	0-24*	3" depth - red brick/oil stained soil 14" depth - wood/oil stained soil 24" depth - wood	Strong petroleum-like odor
D1	0952	0-8*	debris - plastic/styrofoam	
D2	0958	0-6*	wood/rocks oil stained soil	Slight petroleum-like odor
Trench D2	1005	0-24*	construction/demolition material oil stained soil	Trench dug by front end loader working site. Strong petroleum-like odor
E2	1012	0-9*	9" depth - concrete pieces	
E1	1024	0-22*	22" depth - rock/stones	

Table I (contd.)

BORING LOCATION #	TIME	DEPTH (inches)	DESCRIPTION	COMMENTS
DE1	1032	0-18*	construction debris	
F1	1058	0-48		no debris present
G1	1105	0-72	native soil and/or fill	unidentified odor
H1	1120	0-48	native soil and/or fill	unidentified odor
I1	1135	0-60	native soil and/or fill	unidentified odor (slight)
J1	1140	0-51	intermittent pieces of plastic, metal wire, plastic hose; wood refuse	wet area
K1	1158	0-18	wood refuse	wet area
K2	1200	0-18	wood refuse	
K3	1204	0-54	intermittent pieces of glass and metal	
Landfill #1	1520	0-8 refusal	wood	oil-stained soil not found
Landfill #2	1525	0-8 refusal	wood	oil-stained soil not found
Landfill #3	1530	0-12 refusal	municipal trash (glass, plastic bags)	oil-stained soil not found

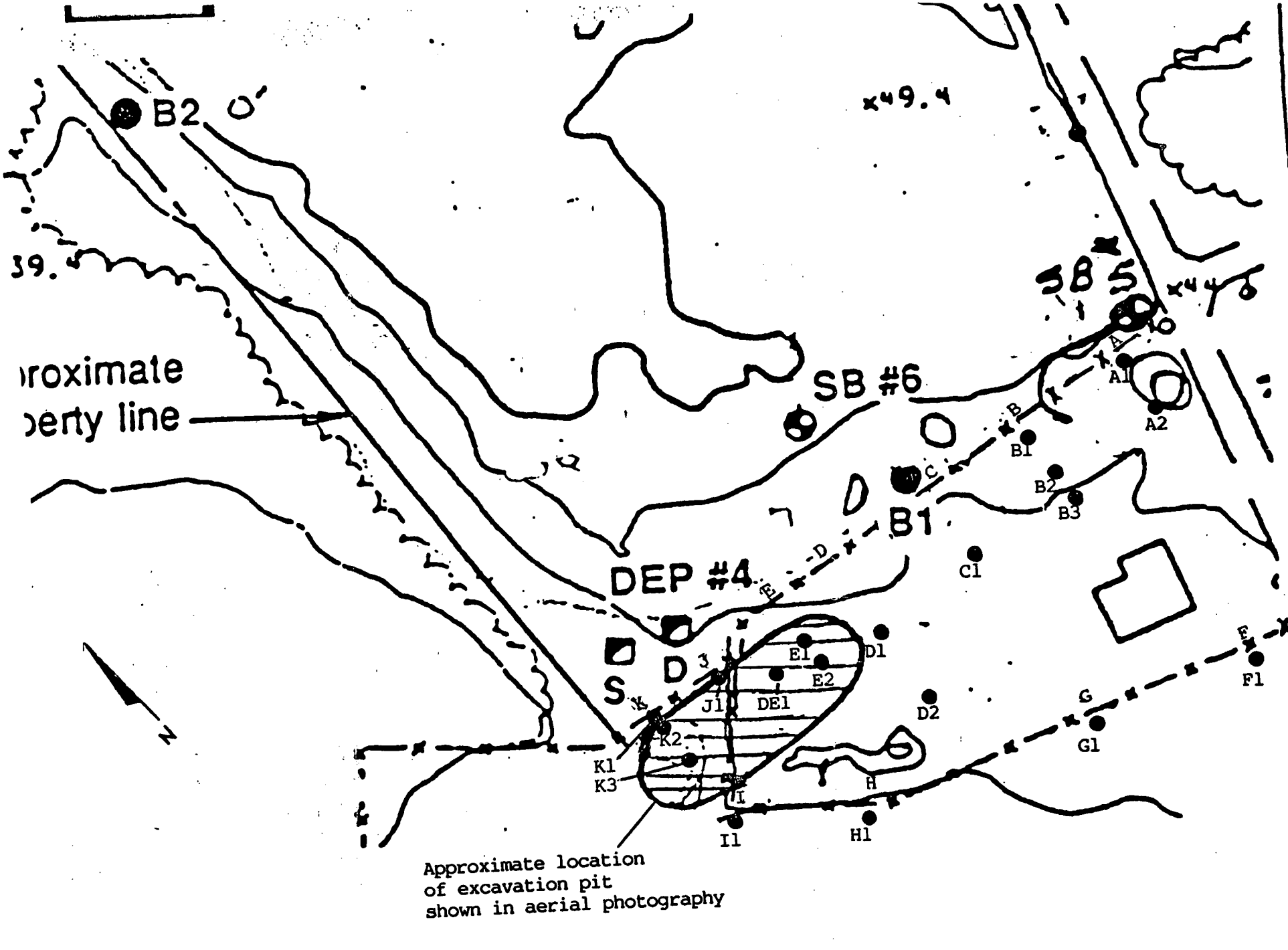

FIGURE 1 Approximate boring locations